

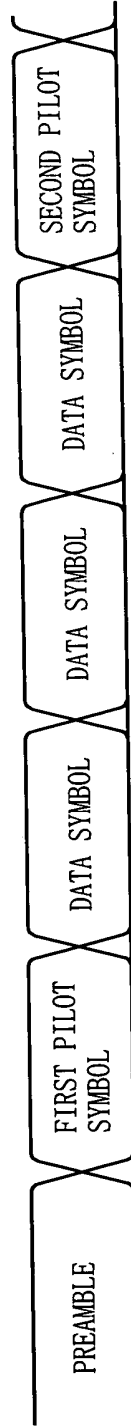
[illegible]

FIG. 1b

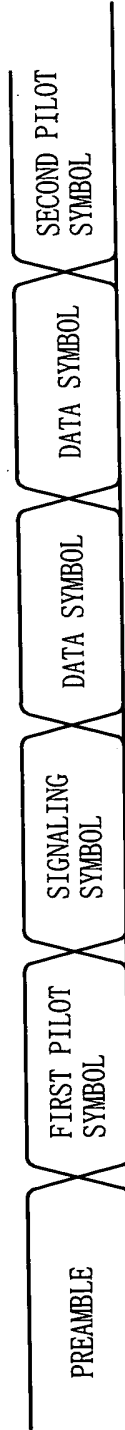


FIG. 1c

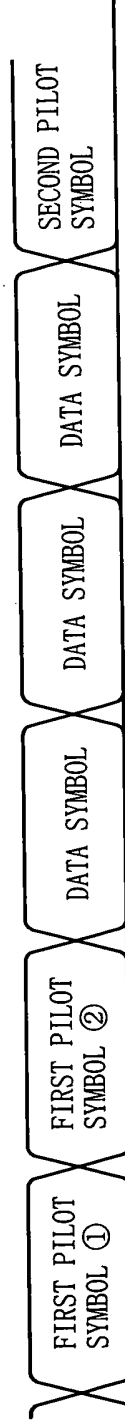
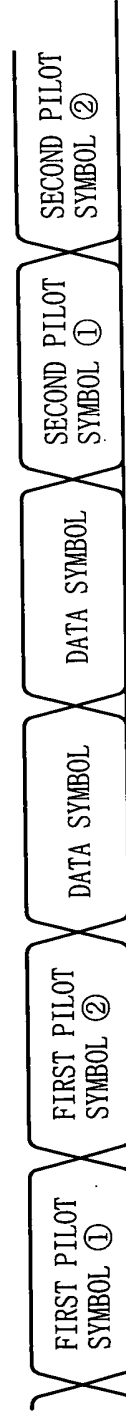


FIG. 1d



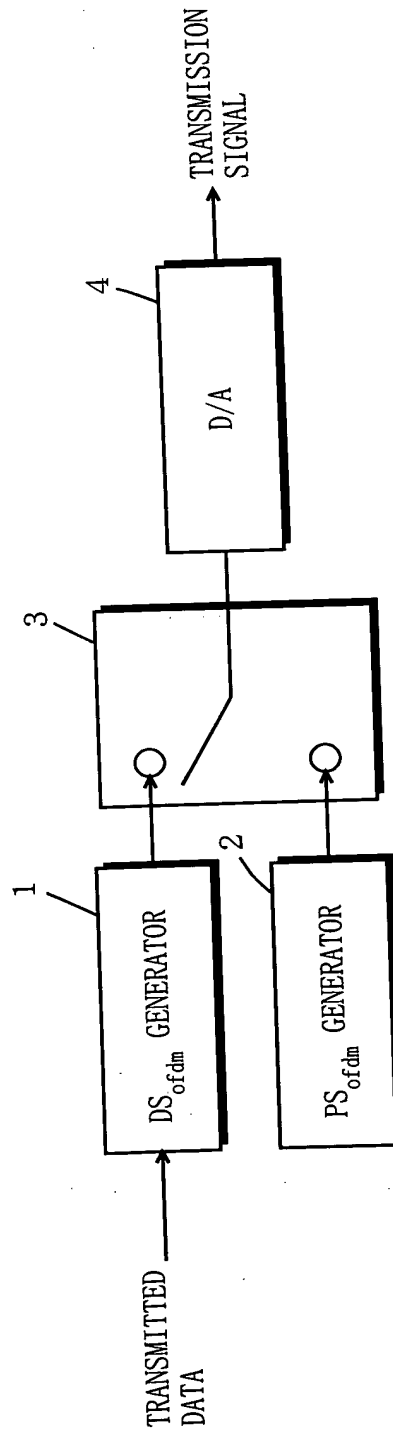
[illegible]

FIG. 3a is a block diagram of a transmitter system. The system includes a DS_f GENERATOR (11) and an INVERSE FOURIER TRANSFORMER (12). The DS_f GENERATOR (11) receives TRANSMITTED DATA and outputs a signal to the INVERSE FOURIER TRANSFORMER (12). The INVERSE FOURIER TRANSFORMER (12) outputs an OFDM DATA SYMBOL.

FIG. 3 a

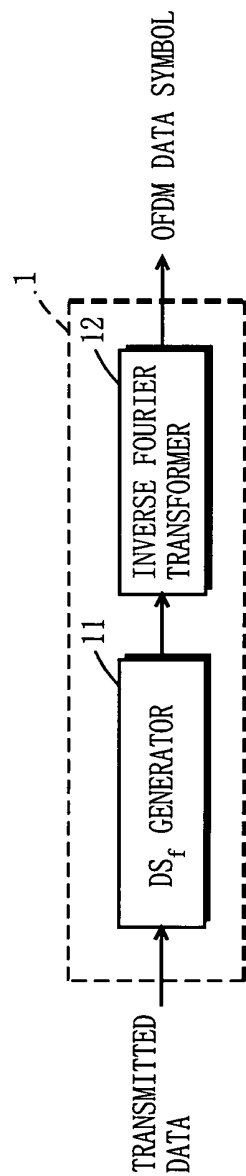


FIG. 3 b

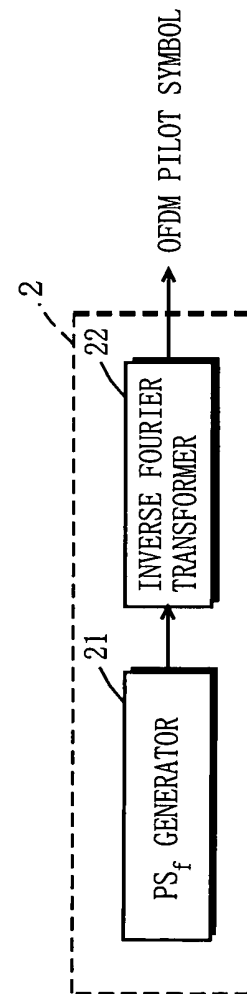


FIG. 4

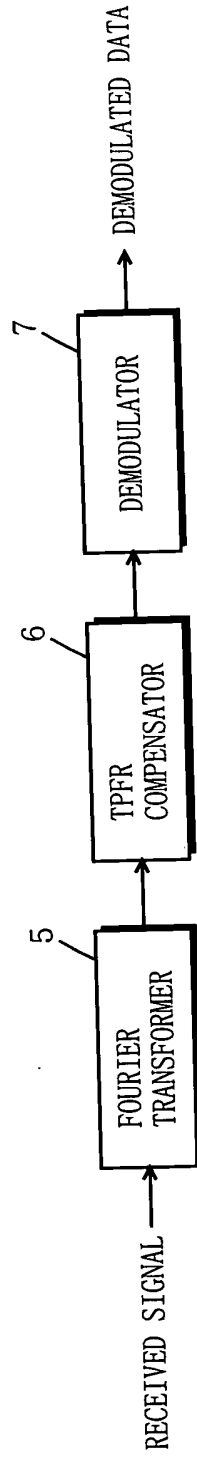


FIG. 5

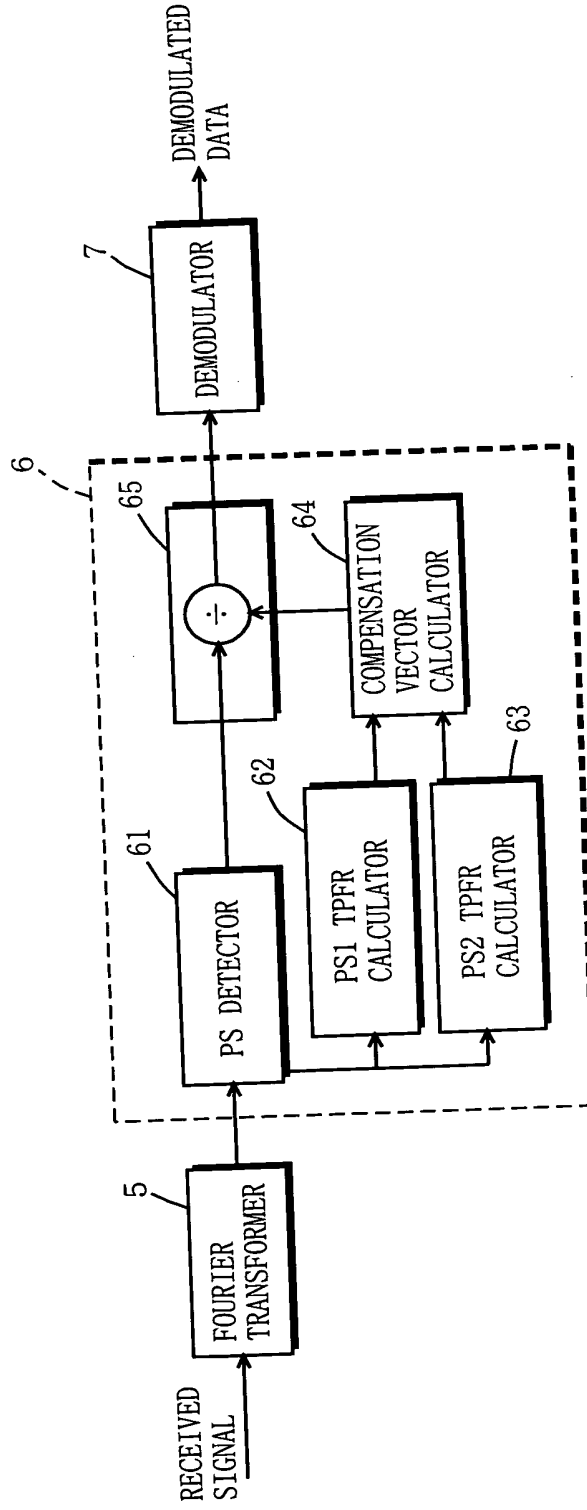
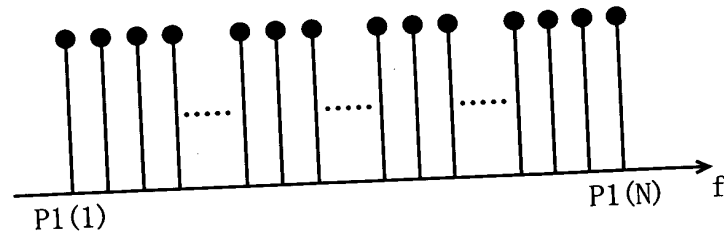
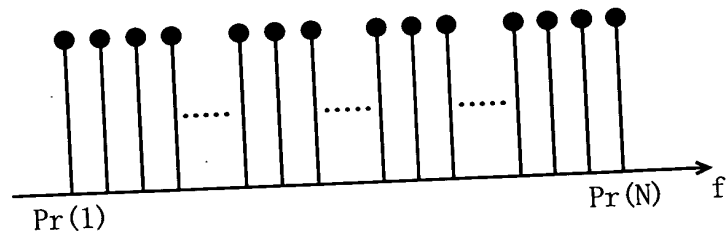


FIG. 6 a



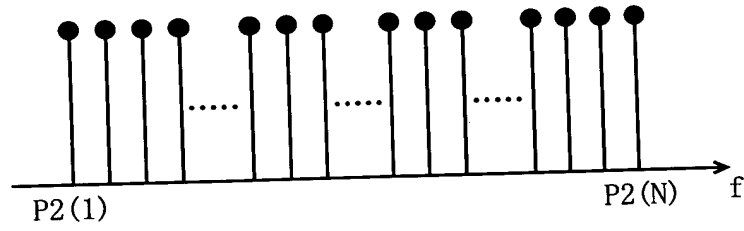
FIRST PILOT SYMBOL

FIG. 6 b



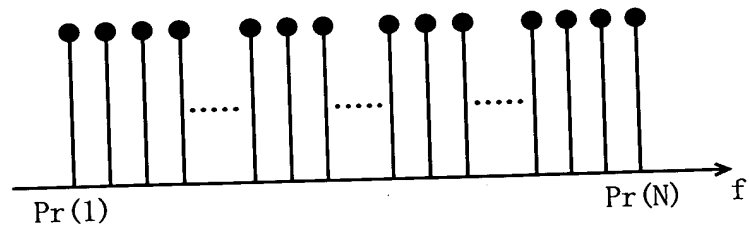
REFERENCE PILOT SYMBOL

F I G. 7 a



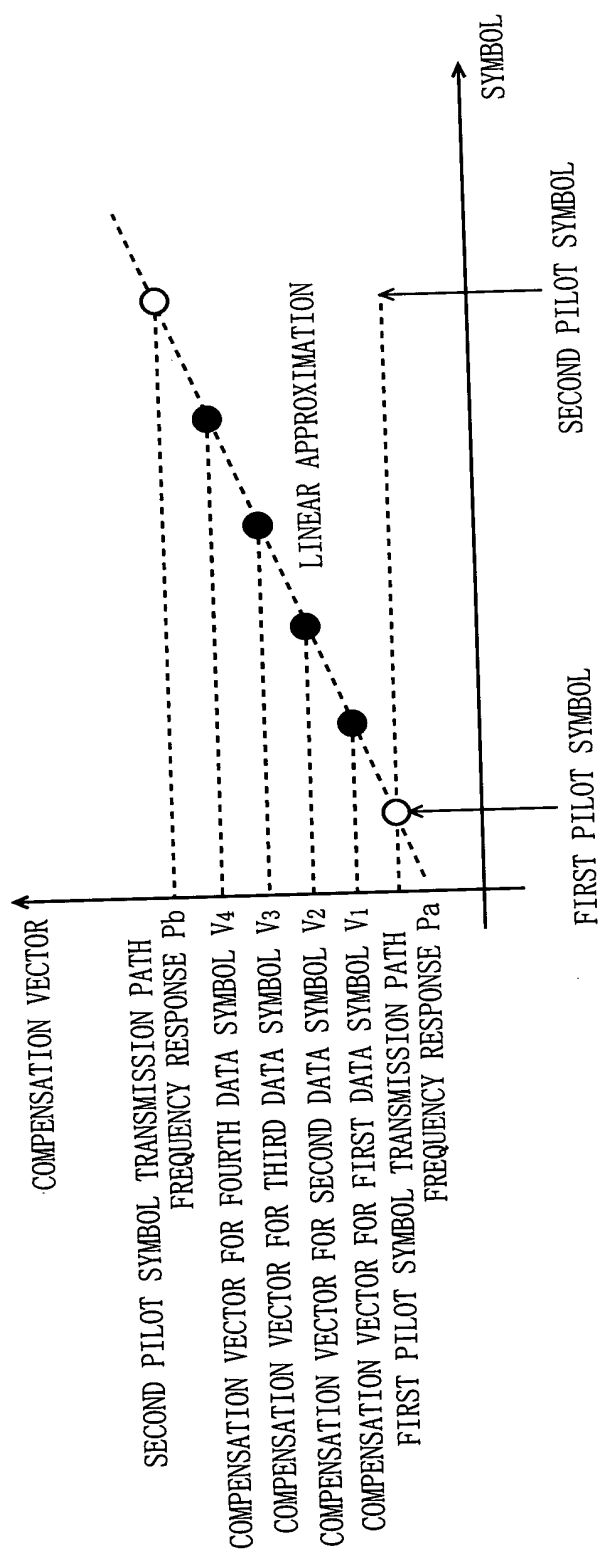
SECOND PILOT SYMBOL

F I G. 7 b

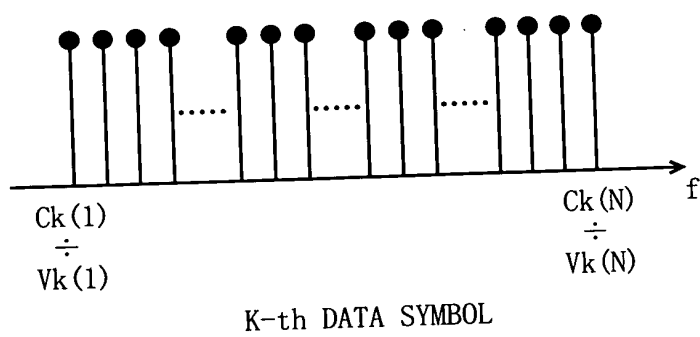


REFERENCE PILOT SYMBOL

The graph illustrates the relationship between the Compensation Vector (Y-axis) and the Symbol (X-axis). A dashed line, labeled "LINEAR APPROXIMATION", passes through four points: V_1 , V_2 , V_3 , and V_4 . These points represent compensation vectors for different data symbols. The graph also shows the transmission paths for the first and second pilot symbols, labeled "FIRST PILOT SYMBOL TRANSMISSION PATH" and "SECOND PILOT SYMBOL TRANSMISSION PATH", and their corresponding frequency responses, labeled "FREQUENCY RESPONSE P_a " and "FREQUENCY RESPONSE P_b ". The first pilot symbol is represented by an open circle, and the second pilot symbol is represented by a solid circle.



F I G . 9



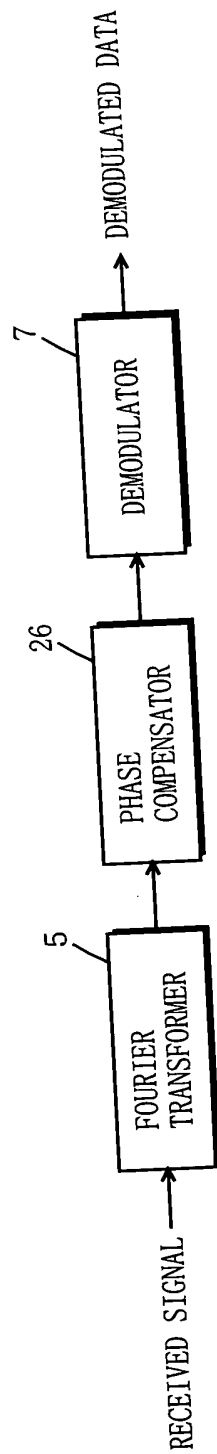


FIG. 10

FIG. 11 is a block diagram of a demodulator system. The system includes a received signal input, a Fourier transformer (5), a PS detector (261), a PS1 phase difference calculator (262), a PS1-PS2 phase difference calculator (263), a phase compensation value calculator (264), a multiplier (265), and a demodulator (7). The received signal is processed by the Fourier transformer, then the PS detector. The PS detector outputs signals to the PS1 phase difference calculator and the PS1-PS2 phase difference calculator. The PS1 phase difference calculator outputs to the phase compensation value calculator. The PS1-PS2 phase difference calculator outputs to the phase compensation value calculator. The phase compensation value calculator outputs to the multiplier. The multiplier outputs to the demodulator, which produces the demodulated data.

FIG. 11

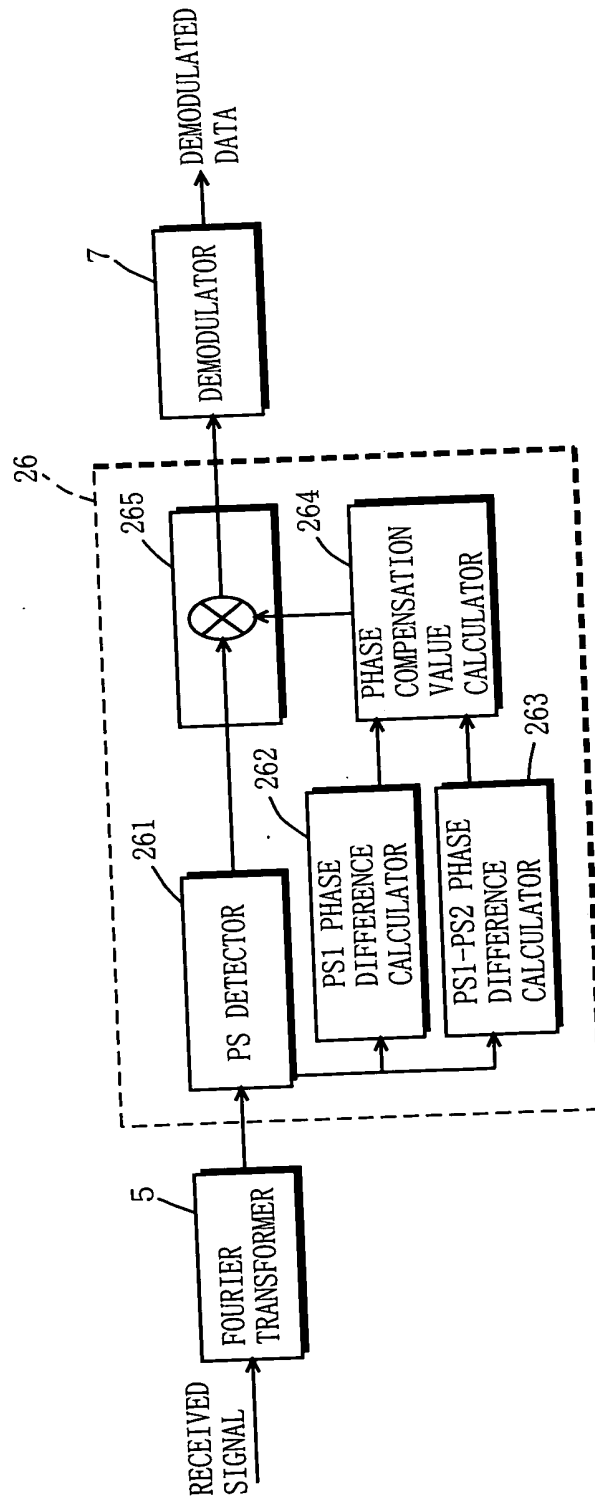
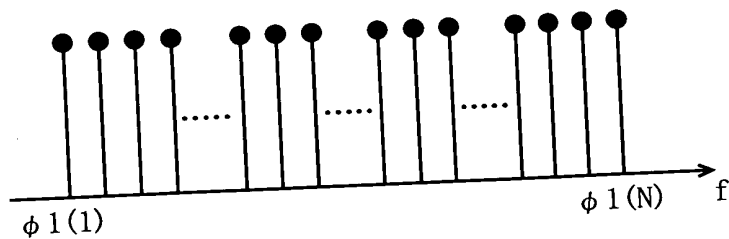
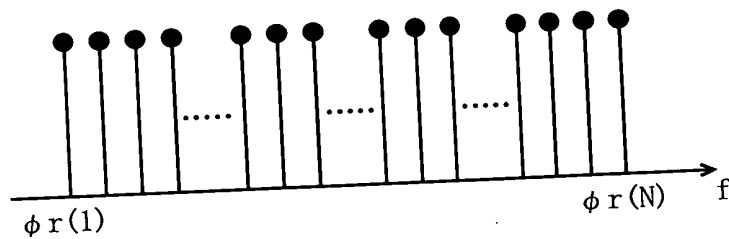


FIG. 12 a



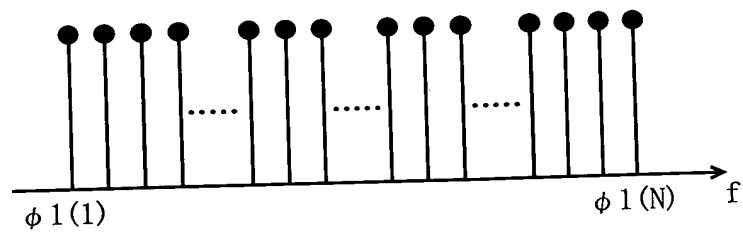
FIRST PILOT SYMBOL

FIG. 12 b



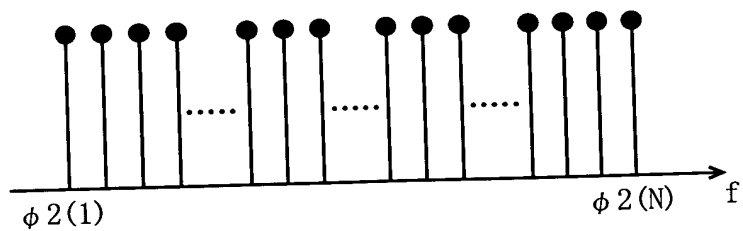
REFERENCE PILOT SYMBOL

FIG. 13 a



FIRST PILOT SYMBOL

FIG. 13 b



SECOND PILOT SYMBOL

FIG. 14

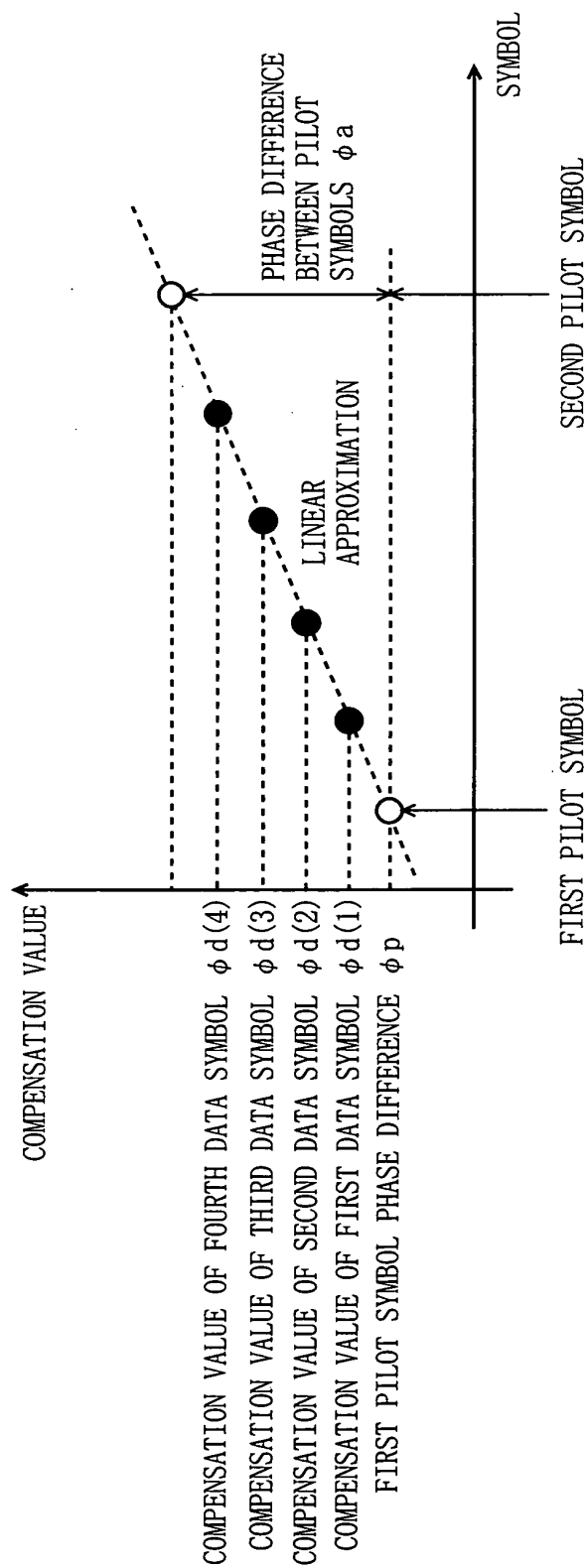


FIG. 15

